

Notice of Allowability	Application No.	Applicant(s)	
	09/688,170	OLIVA, GUIDO MAURIZIO	
	Examiner	Art Unit	
	D. I. Lee	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/30/04.
2. ☒ The allowed claim(s) is/are 33-60.
3. ☒ The drawings filed on 27 December 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. Receipt is acknowledged of the Amendment filed 30 September 2004. Claims 1-32 have been canceled without prejudice or disclaimer; and claims 37-60 have been newly added. Currently, claims 33-60 are pending in this application.

Allowable Subject Matter

1. Claims 33-60 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Rudeen discloses a device providing spotter beams for the aiming and visually indicating reading area of a coded information reader. The device includes a laser diode and an LED for emitting a light beam; an optical element that refracting the light beam (i.e., separate the beam) into at least two different parts, thus the light beam is split to provide at least different light beam portions active on at least two different zones of a reading area (i.e., cursor beam) of a reading area of a coded information reader along at least two different optical paths (i.e., the optical element having a first and second end portions with a central portion there between and wherein the first and second end portions refract the light beam or separate the beam into different parts, thus the light beam is separated to provide different light beam portions active and adapted to be projected on at least two different zones of a reading area of a coded information reader along at least two different optical paths each one on opposite sides of the scan line; wherein that the refractive optical element includes at least two different surface portions, which likely project two different beam portions simultaneously onto at least two different zones of reading area (i.e., the two end portions of the optical surfaces create a pair of cursor beam to form a pair of visible light sports or cursor images on a target, i.e., two joined visible light sports or cursor images on a target) one on opposite sides of the scan line, wherein the first and second surface portions of the optical element are for aiming purposes). The refractive optical element includes first and second opposed faces (lower surface and upper surface of the refractive optical element) respectively for collecting the light beam and

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projecting at least two beam portions on the reading area, wherein an optical axis is defined into the refractive optical element. The second opposed face (upper surface) includes two first surfaces portions each one inclined by a predetermined angle α with respect to the first face (i.e., the inclined surface portion of the refractive optical element is substantially planar with respect the lower surface) and adapted to deflect a corresponding portion of light beam by a predetermined deflection angle β (i.e., the angle defined by the inclined surfaces) with respect to the optical axis.

Reich discloses an optical system having an LED 16 that emits a light beam, a cylindrical lens that forms the light emitted by the LED into a sheet-shaped beam having a field of view.

Reddersen discloses an aiming beam system for optical data reading device having a refractive optical element (a diffractive optical module having a first and a second diffraction surface portions for deflecting portion of the light beam from the light source), wherein the central portion of the refractive optical element is an aperture or a window extended between the first and the second diffraction portion. The central portion (i.e., aperture) transmits the beam without any deflection towards the reading area

Canini discloses an optical device for aiming and visually indicating a reading area having an illuminating assembly comprising an LED as a light beam emitting source, an amplitude mask (a diaphragm having a preset shape or predetermined profile effective to select a portion of the light beam generated by the emitting source) placed downstream of the LED, and a converging lens fixedly placed on the downstream of the amplitude mask adapted to collimate the shaped light beam coming from the amplitude mask and project it onto the reading area. The optical device, located on the optical path downstream of the illuminating assembly, a light deflecting prism, which is a refractive optical element.

One of ordinary skill in the art would not have been motivated to modify the teachings of Rudeen, Reich, Reddersen, and Canini, alone or in combination with other references, in order to provide an aiming device with the specific structural of the refractive optical element (i.e., the second opposed face having four first surface portions, each one inclined by a predetermined angle with respect to the first face and adapted to deflect a corresponding portion of the light beam and a poly-prismatic structure having a

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substantially pyramidal shape with a rhomboidal base) and the predetermined deflection angles in relation to first opposed face and the deflecting angles in relation to the optical axis of the first and the second peripheral inclined surface portion, respectively, are different, as set forth in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. I. Lee whose telephone number is (571) 272-2399. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D. I. Lee
Primary Examiner
Art Unit 2876

D. L.